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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,051	11/18/2003	Michael J. ROSENDAUL	000297-203	1050
29306	7590	02/23/2005	EXAMINER	
MARSTELLER & ASSOCIATES, P. C. P. O. BOX 803302 DALLAS, TX 75380-3302			MONBLEAU, DAVIENNE N	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/707,051	Applicant(s) ROSENDAUL ET AL.	
	Examiner Davienne Monbleau	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/18/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Information Disclosure Statement

The IDS filed on 11/18/03 has been acknowledged. However, the Examiner believes that the reference cited on the PTO-1449 is incorrect due to a typo. The PTO-1449 cites "5150527", but the specification references "5130527". Examiner has changed the IDS accordingly and a signed copy of the PTO-1449 is attached herein.

Claim Objections

Regarding Claim 1, the phrase "night viewer system of the type that uses an image intensifier tube" is vague because it does not clearly define the night viewer system.

Further regarding Claim 1, the phrase "selected types of image intensifier tubes" is vague because it does not clearly state what image intensifier tubes are being referred to.

Lastly regarding Claim 1, it is not clear from which image intensifier tube the voltage gain is being detected. The claim recites that there is one image intensifier tube, but that the detection circuit detects multiple types of tubes.

Claim 8 recites the limitation "the variable resistor circuit unit" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 3, 4, 9, 11, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowen et al. (U.S. 6,150,650).

Regarding Claims 1 and 11, *Bowen* discloses in claim 1 an electrical circuit unit comprising a voltage gain detection circuit unit operably connected to an image intensifier tube (10) for detecting multiple selected types of image intensifier tubes (claim 1 lines 6-11 and producing an output gain signal appropriate to the detected image intensifier tube (10) for controlling the gain of the detected image intensifier tube.

Regarding Claims 3 and 13, *Bowen* discloses in Figure 11 a variable adjustment circuit operably connected between the voltage gain detection circuit unit and the image intensifier tube (10) for providing a desired voltage level signal to the image intensifier tube. *Bowen* further discloses in column 1 that a variable resistor circuit may be used.

Regarding Claims 4 and 14, *Bowen* discloses in column 7 lines 64-67 that the variable resistor circuit further includes a manual gain adjustment means for manually adjusting the desired voltage level signal to the image intensifier (10) by a user. (See also claim 1 lines 8-11).

Regarding Claim 9, *Bowen* discloses in column 4 lines 48-60 and column 5 lines 2-10 a DC-to-DC voltage step-up converter circuit unit for providing a desired power supply voltage signal to the image intensifier tube (10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 5-8, 10, 12, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen.

Regarding Claims 2 and 12, *Bowen* does not teach a voltage bias circuit. However, since *Bowen* is controlling the gain of the image intensifier tube, there must be a circuit component that is sending a voltage to the tube in order to control the gain of the tube. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a particular device, such as a voltage bias circuit unit, for its suitability with the other circuit components.

Regarding Claims 5 and 15, *Bowen* does not teach an amplifier circuit. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an amplifier in *Bowen* to increase the strength of the image intensifier tube (10) output signal.

Regarding Claims 6 and 16, *Bowen* teaches in Figure 2 gain limiting circuit elements (160 and 170), but does not teach a current limiting circuit unit. However, both devices result in limiting the output signal of the image intensifier tube (10) and thus serve a similar function.

Regarding Claims 7 and 17, *Bowen* teaches in Figure 11 a variable adjustment circuit operably connected between the voltage gain detection circuit unit and the image intensifier tube

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(10) for providing a desired voltage level signal to the image intensifier tube. *Bowen* further teaches in column 1 that a variable resistor circuit may be used.

Regarding Claims 8 and 18, *Bowen* teaches in Figure 11 a variable adjustment circuit operably connected between the voltage gain detection circuit unit and the image intensifier tube (10) for providing a desired voltage level signal to the image intensifier tube. *Bowen* further teaches in column 1 that a variable resistor circuit may be used. *Bowen* does not teach an amplifier circuit. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an amplifier in *Bowen* to increase the strength of the image intensifier tube (10) output signal.

Regarding Claim 10, *Bowen* teaches a DC to DC voltage step-up converter circuit, but does not teach that it boosts the voltage of the power source by two times. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to boost the voltage of the power source by a particular amount depending on what voltage was required to operate the image intensifying tube (10) circuitry and the desired output level of the image intensifying tube (10).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Fish (U.S. 6,157,021) teaches an active regulator that reduces the noise occurring on an image intensifier tube particularly suited for use in a night vision system.

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Saldana (U.S. 5,883,381) teaches a night vision device having a power supply which delivers a high voltage level to is MCP through a variable resistance device, wherein said MCP is part of an image intensifier tube.

Estrera et al. (U.S. 6,320,180) teaches a gated power supply circuit for an image intensifier tube.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davienne Monbleau

DNM


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